

CLAIMS:

1. A method for preparing an optical information medium comprising a disk-shaped supporting substrate having a center hole, an annular information recording area thereon, and an annular resin-based light-transmitting layer on the information recording area through which recording/reading laser beam is transmitted, wherein
the light-transmitting layer is formed by feeding a coating fluid containing an actinic radiation-curable resin onto the supporting substrate having the information-recording area formed thereon and rotating the supporting substrate for spreading the coating fluid over the supporting substrate to thereby form a resin layer, and subsequently, irradiating the resin layer with actinic radiation to thereby cure said resin layer while reducing the rotation speed of the supporting substrate.
2. The method according to claim 1 wherein energy density of said actinic radiation on the surface of said resin layer is relatively low around outer peripheral region of said resin layer.
3. The method according to claim 1 wherein said irradiation of actinic radiation is carried out such that outer boundary of the area irradiated with said actinic radiation substantially matches with the outer peripheral edge of said supporting substrate.
4. The method according to claim 1 wherein, in the formation of the resin layer, said irradiation of actinic radiation is carried out after scraping off at least some of the coating fluid that protrudes out of the outer peripheral edge of said supporting substrate.

5. An optical information medium comprising a disk-shaped supporting substrate having a center hole, an annular information recording area thereon, and an annular resin-based light-transmitting layer on the information recording area through which recording/reading laser beam is transmitted, wherein

a recess is formed on the surface of the light-transmitting layer from outside the outer peripheral edge of the information recording area to the outer peripheral edge of the light-transmitting layer, and a minute bump is formed outside the recess.

6. The optical information medium according to claim 5 wherein the relation:

$$D_1 \geq D_2$$

is satisfied when the distance in thickness direction from the surface of the light-transmitting layer at the position just inside the recess to the bottom of the recess is designated D_1 , and the distance in thickness direction from the bottom of the recess to the top of said minute bump is designated D_2 .

7. An optical information medium comprising a disk-shaped supporting substrate having a center hole, an annular information recording area thereon, and an annular resin-based light-transmitting layer on the information recording area through which recording/reading laser beam is transmitted, wherein

the light-transmitting layer is a layer containing an actinic radiation-curable resin formed by spin coating, and

thickness of the light-transmitting layer does not increase from the inner peripheral region to the outer peripheral region, at least on the information recording area.

8. The optical information medium according to claim 7
wherein thickness of the light-transmitting layer is less
in the outer peripheral region compared to the inner
peripheral region, at least on the information recording
5 area.
